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CLINICAL LECTURE.

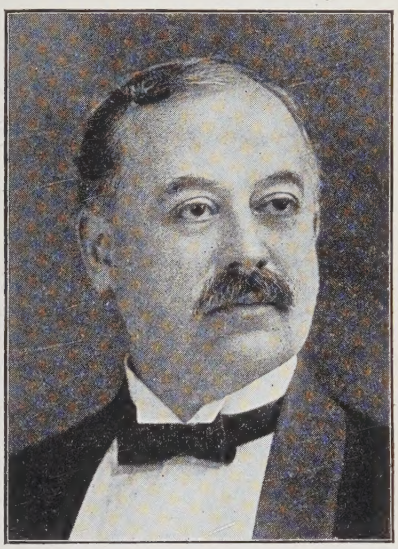
LUPUS ERYTHEMATOSUS.*

JOHN V. SHOEMAKER, M. D., LL. D.

PHILADELPHIA, PA.

Professor of Materia Medica, Therapeutics, Clinical Medicine, and Diseases of the Skin in the Medico-Chirurgical College and Hospital.

GENTLEMEN: You will notice that the skin in the face of this patient is intensely red, feels warmer to the touch than the surrounding skin which is not involved, and is more painful. The patient is a young married woman, 31 years of age, is well nourished and very well developed physically. She has had the usual diseases of childhood, but other than this she has always enjoyed good health. The family history is negative throughout. The present condition of her skin dates back three years when she first noticed a small "red spot," a macule appeared on the right cheek near the ala of the nose. Gradually the spot became larger and larger and spread towards the nose. About four months after the appearance of the macule on the right cheek a similar, but larger, spot appeared near the nose on the left side, which also gradually spread over the cheek and the nose, at the end of about ten months the two reddened areas had coalesced and gave rise to the appearance as your see it today, which is the so-called "butterfly-shaped patch" in lupus erythematosus. By close inspection you will see that these lesions are slightly elevated and covered with thin, grayish scales firmly adherent to and dipping down into the distended



DR. JOHN V. SHOEMAKER.

ducts of the sebaceous glands. Infiltration is quite marked. There, has been little or no pain, but at times she experienced much itching and slight burning sensation.

Diagnosis.—Lupus erythematosus is easily recognized, especially when the face is invaded, the diagnostic points being the location, the peculiar color and shape of the patches, the central scar, the absence of subjective symptoms and the chronic course which should serve to distinguish it from every other skin affection. The diseases with which it is most likely to be confounded are lupus vulgaris, tinea trichophytina, eczema and syphilis.

The short resumé of the differential points as tabulated on the black-board will prevent you from making an incorrect diagnosis.

*Delivered in the Medico-Chirurgical Hospital.

LUPUS ERYTHEMA.

1. Itching very slight.
2. No vesicles or exudation.
3. No incrustation.
4. Onset is slow.

LUPUS ERYTHEMATOSUS.

1. No history of primary infection.
2. Attacks the cheek and nose preferably.
3. Desquamation of scales.
4. No falling of the hair or sore throat.

LUPUS ERYTHEMATOSUS.

1. The lesion is superficial with no papules or tubercle.
2. Sebaceous ducts are patulous.
3. Lesions well defined with scaly patches.
4. Occurs after puberty.

LUPUS ERYTHEMATOUS.

1. Course is slow.
2. No vesicles or papules.
3. Hair not affected.
4. Microscope does not reveal parasite.

ECZEMA.

1. Itching severe.
2. Vesicles and exudation.
3. Incrustation present.
4. Onset rapid.

SYPHILIS.

1. History of primary infection.
2. Eruption more prominent on the back, seldom on the face.
3. No scales present.
4. Hair falls out, throat may be sore.

LUPUS VULGARIS.

1. The nodules and gelatinous tubercles are deep seated.
2. Does not affect the sebaceous glands or ducts.
3. Lesion discrete and ulcerate.
4. Occurs in childhood and youth.

TINA TRICHOPHYTINA.

1. Course is rapid.
2. Vesicles and papules.
3. Hair affected and look stubbled.
4. Microscope reveals parasite.

Pathology.—Lupus erythematosus is a chronic inflammation of the cutis leading to its degeneration and atrophy. The inflammatory process was thought to originate only in or around the sebaceous glands, which is often, no doubt, the fact, but in very many patients the disease may affect all structures of the skin and may have its primary seat in any of them. The microscopic examination of portions of the skin affected with lupus erythematosus indicate inflammatory changes in one or the other component parts of the integument. The glands are thickened, both by an increase of connective tissue and by accumulation of cells externally and internally. The blood-vessels are dilated, the connective tissue is infiltrated with embryonic cells, and there is new cell formation from both the blood vessels and the connective tissue in the parts involved. There may be atrophy of the epidermis, probably due to the glandular proliferation developing seborrhea, and desquamation of the upper layers. In some cases the inflammatory process may terminate in absorption, and the integument return to its normal state, without leaving any evidence of the disease upon the affected part. The tendency in most cases, however, is for the inflammation to cause degenerative changes, leading to atrophy of the affected tissue. The hair follicles and glands may be destroyed, resulting in cicatricial atrophy of the part affected by the disease.

Etiology.—The course of this disease generally occurs as the result of a defective state of general nutrition in persons having an irritable condition of the sebaceous glands, and especially in those who are poorly nourished, chlorotic, and tubercular. While the disease occurs in both the rich and poor alike, and in persons of all temperaments, yet it is more frequently observed in those having light skin and hair. Scrofula of the skin and severe local seborrhea are considered active predisposing causes. The tubercle bacillus has never been found in the lesions, nor has material from them used to inoculate the lower animals produced tuberculosis. This, however, would seem sufficient to discredit the theory held by many that tuberculosis of the skin is the true etiology of the disease.

Treatment.—Since the cause of the disease is chiefly constitutional we must direct our treatment towards that end more so than directly to the disease. There is no internal remedy that has special curative effects, but general hygienic attention with a nutritive and tonic treatment and proper local measures, affords beyond doubt the best results. Hence as a tonic, and hematinic so improve her general economy, and also for its direct influence upon the skin I will prescribe for her a combination as follows:

℞ Ferri iodidi..... gr. xv
Arseni trioxidi..... gr. ij
Calcis sulphuratae..... gr. viij
Podophyllotoxini..... gr. iv
Olei menthae piperitae..... *m* ij
Misce, fiant capsulae No. xxx.
Signa: One capsule after each meal and at bedtime.

Locally.—I advise for her depletion of the parts two or three times a week by the use of a small needle knife and a constant application of an ointment containing zince oleate 10 per cent. Of course as the disease gets better and the parts become paler the strength of the ointment may be lessened.

Prognosis.—The prognosis in this patient is only fairly good. It will require constant and persistent treatment.

THE FIGHT AGAINST TUBERCULOSIS IN CHICAGO.—Efforts of the Chicago Tuberculosis Institute this year to reduce the death rate from this disease in Chicago will require $25,000, according to the estimates of its officials. Plans of the institute include the establishment of a dispensary and a day camp, a comprehensive investigation of conditions in homes, workshops, stores, schools, public conveyances, traveling exhibits, and lectures and conferences. A successful camp sanatorium for women and girls in early stages of tuberculosis is being maintained at Dunning, Illinois. It is known as Camp Norwood. It cost only $2,000 to establish it, and it accommodates twenty patients.

LEADING ARTICLES

MANAGEMENT OF PREGNANCY, LABOR AND THE PUERPERIUM.

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ST. LOUIS.

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MANY do not attach the importance to obstetric practice that they should, thinking that their whole duty is done if they conduct the patient through labor without a funeral. As a matter of fact the three stages constitute a trinity, being indissolubly linked together, and the physician must see to it that one glides placidly into the other without jar or friction. And how is this happy result to be realized? Only by watchfulness and care from beginning to end. Some obstetricians (?) look after the temporal welfare of their patients like they attend to the spiritual welfare of their own souls, i.e., time enough to worry later on. A little attention in advance in either case may save greater worry later. The obstetrician's duty starts at the beginning of pregnancy, and continues until the end of the purperium and the patient has been restored to as normal a condition as existed prior to pregnancy. No man has less excuse for surprise than the accoucheur, as he has had ample time in which to prepare for possible emergencies. Now what are his duties in each respective period

Pregnancy.—First obtain the history of the patient as to previous labors, miscarriages, etc., ascertain the existence of any constitutional disease, as tuberculosis, syphilis or organic heart disease. Any existing disease may have an unfavorable influence on pregnancy and cause premature expulsion of the ovum and death of the mother. Syphilis, for instance, is said to be responsible for about 70% of all abortions. In the presence of maternal syphilis, if recognized early in pregnancy, and vigorously treated, we may prevent loss of the ovum. Every pregnant woman should have a careful physical examination, including the heart, lungs, kidneys, abdominal viscera and pelvic organs. Any abnormality of the thryoid gland should be noted, as goiter in some form is not infrequently present, and may produce alarming symptoms from pressure due to increased growth. Goiter also predisposes to post-partum hemorrhage. The heart should be given particular attention; a valvular lesion may exist with little or no symptoms other than those detected by auscultation and percussion. Dyspnea, if present, may be mistaken for that caused by pressure of the gravid uterus. The increased work thrown upon crippled heart by pregnancy may cause a break in the compensation, and death from acute dilatation, endocarditis pulmonary edema, etc., This calamity may be averted if we take the trouble to find out in time and apply proper treatment, as regulation of diet, increasing elimination by the bowels, kidneys and skin, and the securing of mental and physical repose. Osler mentions numerous cases where a break in the compensation has been restored without the use of heart tonics by simply keeping the patient quietly in bed for a week or two. In any event proper advice may obviate the necessity for more active measures.

The urine should be examined, at least once in two weeks from the third month of pregnancy to the close. In examining the urine the total quantity passed in the previous twenty-four hours should be noted, the specific gravity taken and the specimen tested for albumen and sugar. In suspicious cases a microscopic test should be made for casts and renal epithelium. A diminished quantity of urine with low specific gravity, indicates renal insufficiency with the retention of toxins in the blood, which may terminate in uremia and death or eclampsia during labor. If the microscope reveals tube casts and renal epithelium in quantity it means nephritis. Albumen alone does not always mean structural change in the kidneys, as about 6% of all pregnant women have albuminuria, it does mean that the kidneys are functionally deranged from pressure of the gravid uterus on the kidneys, or ureters, or congested from impeded circulation. The kidney in this condition is termed the "kidney of pregnancy," a condition which undoubtedly predisposes to eclampsia. These complications may be modified or averted by proper treatment. The use of diuretic mineral waters, restriction of the diet, saline catharsis, warm bathing, etc., will do much towards minimizing such troubles and saving life.

The pelvic organs must now be examined, the uterine appendages must be recognized and their condition ascertained. Tubal pregnacy and intrauterine pregnancy may be indistinguishable until rupture of the tube. The size and position of the uterus should now be determined. If the fundus is felt in the hollow of the sacrum a retrodisplacement exists which must be corrected, or neglect to do so may result in abortion, incarceration of the gravid uterus, rupture of the bladder from pressure of the displaced cervix against the urethra, gangrene of the colon from pressure, and death from general sepsis. The sim-

ple replacement of the uterus during the early months of pregnancy, and its retention by a pessary for a few weeks until by its growth it is too large to again fall back into the pelvis will prevent further trouble, unless adhesions exist where other measures will have to be used which will not be spoken of here. Next, the pelvic diameters should be carefully estimated particularly by those who practice amongst the foreign born, as they are more subject to ricketts, Pott's disease and other bone lesions, which cause pelvic deformity than the native American. The pelvimeter is a valuable aid at this time. After the sixth month one may determine the presentation and position of the fetus, and if placenta previa be present it may be recognized and ample time had to outline a plan of treatment. From the above it may be seen what an immense amount of necessary knowledge may be obtained by the expenditure of a little effort on the part of the doctor, and after all he has but done his duty.

Labor.—If the advice as outlined is followed the time of labor need cause the attendant no anxiety as he has intimate knowledge of the case from the beginning, and has put his patient in the best possible condition to successfully withstand the arduous process of labor. But here is where the doctor himself may prove disastrous from lack of thorough asepsis in his examination. It is more necessary for the obstetrician to be clean than the abdominal surgeon, who has always been exploited as the ideal in that respect, when the honor should go to the obstetrician. A vaginal examination during labor is never free from danger, so strict asepsis is the rule. As a preliminary the bowels and bladder should be emptied, the external genitals and surrounding parts should be carefully scrubbed with warm water, green soap and soft sterile brush or absorbent cotton, then irrigated with 1 to 2000 sublimate solution, and lastly sterile water. It is my custom in addition to the above to shave the lower portion of the vulva; by so doing you minimize the danger of subsequent infection from clotting of the lochia about the vulva, which may in future be kept clean by simple irrigation with sterile water. The physician should prepare himself with equal care. He should scrub his hands and arms thoroughly with a stiff nail brush, green soap, and, preferably, he should wash in running water, after scrubbing the hands should be immersed in 60% alcohol, then 1 to 2000 bichloride, lastly in sterile water; sterile rubber gloves may be worn as an additional precaution. Over the street clothes should be worn a sterilized gown. If we have examined the patient a few weeks prior to labor, it would seem unnecessary to repeat the operation during labor when the danger is greater. Theoretically, we should be able to tell when the os has dilated without an examination, as cervical dilatation is accomplished by the uterine muscles alone, and when the abdominal muscles are brought into use we know that dilatation is complete; and the second stage of labor begun. But it is not necessary to rely upon this rule if we will but be clean.

The passage of the presenting part (normally the head) through the vulvar orifice calls for intelligent management if we would protect that complex structure the perineum from injury. Usually with care the perineum will withstand the passage of the head without rupture, and all would be well if the doctor did not get in too big a hurry to complete labor. After the birth of the head no effort at extraction should be made until the next step in the mechanism of labor has occurred, namely, anterior rotation of the shoulders. After the birth of the head time must be given for the shoulders to rotate into the antero-posterior diameter of the pelvis. If traction is made before rotation we pull the bisacromial diameter tranversely through the vulvar orifice and perineal laceration results. By simply supporting the head and waiting for rotation the shoulders will be born by the natural forces, with little or no injury to the pelvic outlet.

As mentioned, the bowels and bladder should be emptied before the second stage of labor, as distension of either may act as an impediment to proper descent and mechanism; the posterior bladder wall may be caught between the pubic symphysis, and the presenting part, and subjected to sufficient pressure to produce necrosis and fistula. Or a portion of the rectal contents may be forced out and contaminate the external genitals and infection result from the colon bacillus.

With the birth of the child and ligation of the cord the third stage of labor is inaugurated. Tying of the cord is not devoid of importance. As a general rule it should not be ligated until pulsation has ceased. Some writers claim that premature ligation of the cord deprives the infant of about three ounces of blood, to which it has a right. A recent method is to tie the cord a second time (after the completion of labor) by transfixing it with a needle threaded with catgut, which is tied in a pedicle knot, cutting off the excess and applying 80 per cent alcohol to the cut surface, covering with sterile gauze or cotton. The treatment of the third stage of labor has for its object the securing of firm uterine contraction and the expulsion

of the placenta and membranes. Firm contraction of the uterus is the key to the prevention of post-partum hemorrhage. As soon as the second stage of labor is completed the fundus of the uterus should be grasped firmly through the abdominal wall by an intelligent assistant and kneaded vigorously until it is felt to firmly contract. The uterus should not be allowed to get beyond control, but gentle kneading and rubbing be continued to maintain contraction and retraction. It is hardly ever necessary to invade the uterus for removal of the placenta, spontaneous delivery is the rule unless the physician gets anxious and pulls on the cord which may result in tearing the placenta, leaving a portion behind, or inversion of the uterus may follow such action If expulsion of the placenta needs to be aided the well-known method of Crede is probably the best. Care, however, must be taken not to make lateral pressure for fear of injuring the appendages. With the fingers grasping the fundus with the thumb anterior, pressure should be made downward and backward in the pelvic axis, which will result in the placenta being expelled from the vagina, from which it is received by the hand of the physician, being careful to see that the membranes are complete. After the patient has rested the external genitals should be examined for possible injury, the character of the lochia should be noted. If there is an excess of arterial blood in the discharge it is probable that the circular artery of the cervix has been torn and profuse bleeding may result in spite of the fact that the uterus is contracted. We must immediately look for the source of bleeding, place patient in lithotomy position in a good light, introduce a sterile speculum, which will enable you to discover the source of bleeding, and apply the proper remedy. Such a case demands immediate repair of the cervix, the torn surfaces are coapted and sutured with chromic gut, when arterial bleeding will cease. If the perineum is lacerated it should be promptly repaired. Simple suturing of the vaginal mucus membrane does not repair an extensive injury, we must seek out the torn ends of the perineal muscles and suture one to the other in their proper relation. For the convenience of the operator and the future comfort of the patient it is better to deliver all women on a properly prepared table. Such a table may be had in any home. A kitchen table covered with a blanket and clean sheet answers all the requirements. The physician should provide a rubber pad to put under patient, which is covered when needed with a towel sterilized by boiling. The use of the table avoids soiling the bed, and any operative procedure necessary is carried out to better advantage.

Puerperium.—This covers the period from delivery to complete involution of the uterus, extending over about eight weeks. In normal cases the first two weeks should be spent in bed. An abdominal binder should be worn, as it does no harm and gives comfort to the patient. No special pad should be placed over the uterus, except where hemorrhage is feared, as it predisposes to retrodisplacement. The lochia should be received on pads specially prepared, clean (?) rags should not be used for such purpose. A sufficient number of pads should be prepared in advance, composed of absorbent cotton enclosed in gauze. Pads may be sterilized by dry heat in an ordinary bake-oven. They should then be kept in a covered glass jar, and removed one at a time with clean hands, as needed. A T bandage should be used to hold them in place, the vulva being cleansed at each change by irrigating with sterile water. The preliminary shaving before referred to makes the care of the vulva a simple matter. A vaginal douche should never be given. Investigators have shown that the healthy vagina is free from disease-producing organisms. As a matter of fact the secretions from the normal vaginal mucosa are bacteriacidal and protective. Normal cases should remain free from fever. For the first few hours after delivery the temperature may be slightly subnormal on account of exposure, loss of blood and loss of the body heat of the fetus, but it soon returns to normal, and should stay there. The so-called milk fever about the third day is a myth. One must not forget that fever from infection is manifest about the same time. Fever may occur from the absorption of toxins from the intestinal tract, but it subsides after free purgation. But any rise in temperature during the puerperium needs close watching. After-pains may be so severe, especially in multipara, as to be mistaken for a beginning peritonitis, but a differentiation is not difficult. In peritonitis the pain is more diffuse and continuous abdominal tenderness and swelling, is marked, fever is present, lochia is diminished or suppressed, and there is general systemic disturbance and vomiting. After-pains are intermittent, lochia is increased, clots are expelled by the uterine contractions, temperature remains normal, and there is no vomiting or general disturbance. A useful prescription to assist involution, and for its tonic effect is:

Ergotin	gr. ii
Quin. sulph	gr. ii
Ferri sulph	gr. ii
Strych. sulph	gr. $\frac{1}{60}$

to be given in pill or capsule three times a day until patient is out of bed. The care of the bladder is important. If a catheter is used it should be boiled each time, just before using, the meatus and surrounding parts should be cleansed gently with cotton and boric acid solution, the parts should be exposed enough to see what one is doing. Carbolized vaseline should be used as a lubricant. When catheter is being withdrawn the end should be covered with the finger to prevent the urine in the tube from dribbling over the vulva. Patients should be induced to pass urine normally as soon as possible, even to getting out of bed for that purpose. For the engorgement of the breasts dry hot applications, massage, saline purgation and the breast pump should answer the indications. After nursing the nipples should be carefully washed with a saturated solution of boracic acid and bathed with dilute alcohol. Care must be taken to prevent erosion of the nipple, or infection and abscess may result. Women should avoid heavy work or violent exercise for at least two months after delivery, or until involution is completed.

The object of this paper is not to advance any new ideas, but simply to repeat some well-known truths which are too often forgotten or overlooked, and to impress upon the practitioner the importance of his obstetric duties.

4263 Morgan Street.

A BRIEF RESUME OF THE THEORIES IN REGARD TO THE ETIOLOGY OF CHRONIC ENLARGEMENT OF THE PROSTATE.*

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ST. LOUIS.

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DURING the short time that I shall address this society, I will confine my remarks to the various theories advanced by investigators, who have given time and study to this subject, and at the outset I wish to state that these remarks are simply the result of an investigation into the literature on the subject, and contain nothing the nature of which is original to me.

All conditions which cause enlargement of the prostate, such as malignant growth or tubercular process will be eliminated, and the one condition, senile chronic hypertrophy, will be the only one about which these remarks will be directed.

In order to thoroughly appreciate the various theories, a clear conception of the histology of the gland is a pre-requisite to a proper understanding of the pathological processes in which it is so often the seat.

Morphologically, the prostate gland resembles in structure the female uterus, and is composed of muscular fibers, glandular elements plentifully interspersed with connective tissue. It is well to emphasize at this point that the gland may be enlarged at any time in the life of the individual, due specifically to some form of irritation or acute infection, causing a general enlargement. These conditions, however, are not to be understood as true hypertrophy, which is seen only in middle or later life.

The first explanation that has been suggested as a causative factor was on the ground that it was simply a degenerative change, which is usually observed among old people. Habits and general environments of a certain nature have a decided influence in the development of diseases of this gland. A theory once advanced that the chronic enlargement of the prostate in the male was analogous to fibroids of the uterus of the female has been disproved. Personally I can state with some assurance that in the South where an opportunity was afforded me for the examination of a very large number of negroes, both male and female, that while fibroids of the uterus were most common, enlargements of the prostate were extremely rare

Otis claims that hypertrophy of the prostate is not seen in Japan, India or China. It is also interesting to note that while the prostate gland is constant in mammals, man is the only example in which the gland becomes hypertrophied, and for that matter, the only animal in which the hemorrhoidal vessels varicose. It has been suggested that perhaps the changing from the quadripedal to the bipedal, not only is the relation of the gland to its adjacent tissues changed, but also those of the entire pelvic floor. The rectum undergoes a complete change in position, and consequently its relation to the gland. The position therefore throws the weight of the abdominal viscera upon the floor of the pelvis, and, therefore, more or less upon the prostate, thereby obstructing to some degree its circulation. It has been held that infection occurs through the rectal wall, causing hypertrophy of the prostate, though this explanation was probably advanced to account for cases for which there exists no history of local infection.

Virchow's original dictum, that chronic enlargement of the gland under discussion, was due to chronic inflammation, starting in the glandular structure has been refuted by

*Read before the St. Louis Medical Society, March 9th, 1907.

many competent observers. Ciechanowski, Central Blat. f. Chir., Bd. XXXII, 1896, and later Green and Brooks in the Jour. A. M. A., April 26th, 1902, in a comprehensive study of the process, came to the conclusion that enlargements were due to a chronic inflammatory process, which is usually progressive, and which covers a very variable length of time, and leans to the venereal infection of this gland as the causative factor. This theory is also met with objections for the reason that in hypertrophies due to acute infections they undergo, as a rule, subsequent general atrophy. This, of course, does not occur in chronic hypertrophy of the prostate. Besides this, there are many cases on record where no history of gonorrheal infection could be obtained, while the reverse of this proposition is also an established fact where with a history of venereal infection there occurs later no hypertrophy of the prostate.

The etiology has been variously described, as suggested a minute before, to gonorrhea, coitus reservatus, excesses, stimulants, local irritation, catheterization, etc. Possibly these various causes may induce engorgement and congestion, which initiates a chronic inflammation that leads eventually to a chronic hypertrophy. This seems reasonable too from the fact that in 35% in men over 60 years of age hypertrophies were found, though in not more than 20% of those does the hypertrophy cause serious inconvenience.

An interesting theory suggested by Lanvois is that the disease is but a part of a general arterio-sclerosis effecting urinary organs, and that the retention of urine is but an associated condition. This is mentioned in passing, as it hardly adds much to the solution of the problem.

Rovsing continues to maintain that the etiology is simply an overgrowth of the muscular elements associated, and even due to glandular hyperplasia. It is interesting, in this connection, to follow Rovsing's argument, and the apparent contradiction of the general scheme of the human economy that a general overgrowth should thus locally occur when it is a well-known fact that at this late stage of life there is a universal retrogressive and atrophic change going on. He declares, however, that the glandular hypertrophy is due to the effort on the part of the organ to compensate for senile insufficiency. Examination shows that overgrowth of the glandular element is rather rare, the stroma being the portion usually hypertrophied. This, then, is a refutation of Rovsing's theory. Even in cases where the glandular element predominates it might be mentioned that even this picture is not inconsistent with other tumors seen late in adult life, for example, carcinoma.

Hypertrophy is not unknown in middle life, but its presence is not recognized until it begins to interfere with the mechanism of urination, which usually occurs in old age.

From the foregoing recapitulation it can safely be said that at the present time the true etiology of chronic hypertrophy of the prostate is as yet unknown, and I agree with the remarks of an observer when he states that it must be considered in a class similar to benign tumors, the causes of which, up to the present time are still a matter of specu-lat

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CEREBRO-SPINAL MENINGITIS.—Dr. Henry N. Mayo of Salt Lake City, has found a new treatment for cerebro-spinal meningitis, says the Pacific Medical Journal, based on the knowledge that oxygen is fatal to the bacteria which produces meningitis. The doctor removes a certain quantity of cerebro-spinal fluid from the spinal canal and injects a quantity of air instead. Where the conditions have been at all favorable the doctor reports that this treatment has been followed by rapid improvement.

ORANGES AS MEDICINE.—There is no doubt that pure fruit juice is one of the best blood purifiers and system regulators that we possess—in fact, there are many who can testify to this fact, particularly as regards oranges. Some people who have hitherto eaten fruit between meals, or just before going to bed, and condemned it as injurious, have learned to eat one or two oranges with nearly every meal, particularly breakfast, and have found to their pleasant surprise that it exercised a marvellous effect upon their general health. Many remarkable things have been claimed for oranges taken as a food, such as making the complexion clear and beautiful, curing the drink habit, and numerous other things as varied as marvellous, and there are doubtless persons who have made themselves ridiculous eating oranges by wholesale in the endeavor to cure every disease to which flesh is heir. Thousands of persons can testify, however, that a judicious use of oranges is a good thing, but a few precautions must be taken. In the first place, buy nothing but good fruit, especially ripe fruit. Green or bad fruit can not be good for anybody. Then be careful to peel your orange carefully, for the white pith lying beneath the yellow rind is one of the most indigestible substances known in the vegetable world. Do not eat too many oranges at first; but if the habit once formed, a person will never be satisfied to eat a meal without fresh fruit of some kind.—Health.

WHAT SHALL WE DO WITH CHARCOT JOINTS? A CLINICAL PRESENTATION.

S. GROVER BURNETT, A. M., M. D.

KANSAS CITY, MO.

Clinical Professor of Neurology in University Medical College; Medical Superintendent Dr. Burnett's Private Home for Nervous and Mental Diseases and Inebriates; formerly Assistant Superintendent Long Island Home, of New York, for Mental and Nervous Diseases and Inebriates.

CHARCOT'S DISEASE is no longer so rare but what all physicians may at some time have to contend with it. Because of the underlying well known irremedial pathological

DR. S. GROVER BURNETT

changes the question of the wisest disposition of these cases leads me to a clinical presentation in the following:

March 12th, 1900, I presented to the Kansas City Academy of Medicine this first illustrated case:

History: Age 45 years, an omniverous worker who had metamorphosed his tissues into a comfortable bank account.

Twenty-two years ago he gave his right knee a twist, causing swelling, pain and lameness, but fully recovered in three months.

Sixteen years ago, six years after the accident, he contracted a venereal sore on the glands penis, insignificant in character, which shortly healed and was not followed by specially disturbing secondary.

Ten years ago, or twelve years after the injury, and six years subsequent to the venereal infection, the same knee swelled and had a dull, stiff, painful feeling which he denominated rheumatism. He was not aware of any sensory defect in the leg or knee at this time. While he thinks the enlargement of the knee receded some, it never disappeared.

In 1896, four years ago, eighteen years after the injury and six years after the so-called rheumatic swelling which never disappeared and ten years post-date to the leutic lesion, he began to realize a numbness and cushiony feeling in both feet that annoyed him in walking.

In June, 1897, he had a severe attack of emesis with aural vertigo. A second attack, a month later, confined him to the bed forty-eight hours, and a third lighter attack came in another month.

In February, 1898, a sudden, causeless swelling came in the right ankle and knee without systemic symptoms. The pain described was a sore, bruised-like feeling, such as is complained of in the tissues after the lancinating pain of tabes has subsided. He also had a violent, sudden gastric crisis, both vomiting and purging with aural vertigo, prostrating him for two days.

In three weeks this acute swelling subsided. Again he had a violent sudden gastric crisis, both vomiting and purging, with aural vertigo, putting him down and out for two days more. In the next six weeks he had many less severe attacks, in which the aural vertigo played a prominent part. Partial deafness supervened but a competent aurist diagnosed a normal ear.

During July and August, 1898, a nerve specialist and his coworker put him through the test meal pumping process, and diagnosed nothing, notwithstanding he was now very unsteady on his feet.

From August, 1898, to April, 1899, he ran the gauntlet from general medicine and mud baths to osteopathy. After a few generous osteopathic twists, the right knee took on a rapid painless enlargement.

Dr. Jabez N. Jackson was consulted now, pronounced it a non-surgical joint and called me in consultation.

Examination.—Hearing in left ear defective. No local disease of ear. Has occasional sharp, sudden flashing sounds attended by vertigo. Is analogous to lightning pains of tabes, and is dependent on atrophic nerve changes.

Eyes.—Reaction of both pupils to light and accommodation, present. All globe rotation, normal.

Upper Extremities.—Both arms, forearms and hands normal.

Static Ataxia.—Markedly present and raising of the body weight on the toes is impossible.

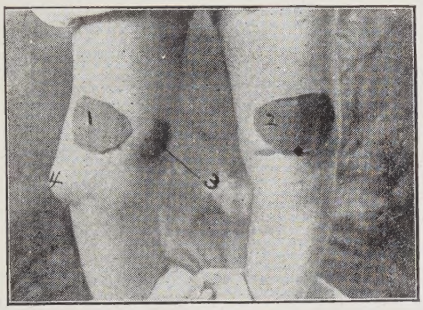
Sexual Functions.—Marked decrease in power and desire in the past two years.

Bowels and Bladder.—Apparently in fair condition.

Lower Extremities.— Knee, plantar and cremaster reflexes absent; abdominal, present. The right leg between the ankle and knee presented a marked edema which pitted on pressure.

The right knee was very large and painless, measuring 21 inches.

Left knee 16.5 inches. Two very large flat new bone formations (cut No. 1, figs. 1 and



Cut No. 1. Figures 1 and 2 enormous osteophytes, and 3 a lesser osteophyte—all of which were movable and changed their positions between the femur and quadriceps extensor. Fig. 4 fluid bag; it became very large before rupturing.

2) and one smaller (Fig. 3) were easily found and readily moved about from side to side between the quadriceps extensor and the femur. The external surface of the right knee (cut 1, Fig 4) and extending posteriorly to the flexure was a large, tense, fluctuating fluid body. There was occasional crepitation in manipulating the newly formed flat, bony growths mentioned, but none in the joint proper.

Sensory Symptoms.—The tactile sense was absent; thermal sense was exaggerated to cold, with heat sense absent; muscle and tendon sense and articular sense in the knee and smaller joints was absent.

The anesthetic zone applied to both legs, shading into normal sensation at a line across the sacral border.

Diagnosis.—Tabes, developing a Charcot joint in the incipiency and later gastric and aural crises.

In three months the swelling decreased to 18 inches from 21 inches circumference measurement of the knee.

The patient remained active till August, 1903, when he got a lick on the same knee from a swinging door. Rapid enlargement followed, measuring 25 inches. At figure 4, cut 1, an enormous fluctuating bag formed. The skin became tense and shiny. Strapping, rest, non-use and absorbents availed nothing. Rupture was evident.

To minimize destruction of external tissue I aspirated and drew off eight ounces of albuminous fluid. The bag refilled in twenty-four hours. Eight ounces were aspirated daily during September and October. The fluid contained, microscopically, many cartilage cells and pigment detritus, showing the joint structures, proper, were disintegrating. The process was painless except, at times, when the joint seemed to become locked, temporarily, and caused some pain in the knee flexure. Dissection of the joint revealed an ivory-like bone formation the shape and size of a quail's egg which would slip between the posterior articular surfaces of the femur and tibia and lock the joint till he could dislodge it by experienced determined manipulation.

Still wearing summer underclothing, November 1st, 1903, a cold, sharp morning, he left home on business at 5 o'clock and got chilled. He did not warm up, and had a distinct rigor in the afternoon, and returned home. Up to midnight he remained chilled with frequent intervening hard rigors. The next morning I found him as follows:

Temperature 104 deg. F., some coryza and muscular aching. Hot bottle applied to his anesthetic legs had burned them badly in several places.

The fluid bag at 4 was tense and large, and the fluid formation extended well over to the inner side of the knee. Subluxation of the joint surfaces was apparent.

On the third day I called Dr. Jabez Jackson, who made a free drainage at the inner and dependent portion, discharging an enormous amount of an albuminous fluid, cartilaginous debris, dark pigment masses and pus cells.

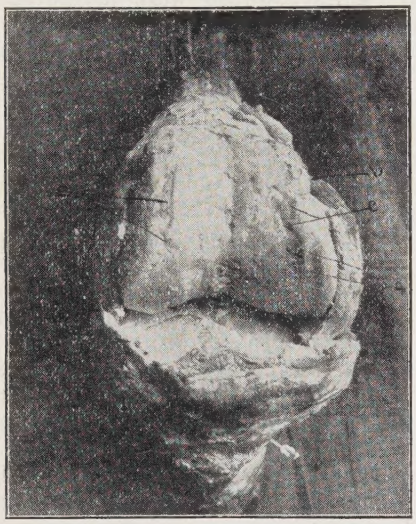
Temperature remained 100 deg. F. to 102 for a week. The urine contained considerable albumen and hyalin casts, but no other casts.

Three weeks elapsed before the urine was about clear of albumen.

The discharge from the knee continued unabated, but with no special fetor to it. Although every support was given to maintain the patient's vigor he was fast becoming bedridden; his leg was a millstone, and on December 3d, 1903, Dr. Jackson amputated it in the middle third of the femur (analgesia was so complete that very little anesthetic was necessary).

Running from the knee directly up in the posterior-median line of the thigh muscles was a new bone formation about the size of the fibula terminating in a free semi-cartilaginous extremity in the upper third of the thigh muscles. The part remaining above

the amputation line was dissected loose and snipped out. An uninterrupted recovery followed; the bedridden depletion, cachectic skin and albuminous urine were all made good.



Cut No. 2. From specimen presented to the Pathological Laboratory of the University Medical College. Photographed by Dr. Arthur E. Hartzler, showing retrogressive changes in the articular surfaces of the femur and tibia.

Cut No. 2 is an accurate illustration of the pathological changes found in the internal joint structures. The extremities of both femur and tibia are markedly hypertrophic. The articular margins of the femur had become fragile and were easily fractured.

At "b" a considerable piece of bone had suffered fracture and separation from the condyle. The synovial membrane had undergone thickening and destruction. Marked atrophic and retrogressive changes were manifest in the articular cartilages. At c c and other points shown in the illustration, the cartilage was badly damaged. At a a the cartilage had disappeared and left the bone denuded and eroded. On the outer side, at 4, of cut No. 1, the joint capsule was destroyed and admitted of the insertion of the fingers between the articular surfaces prior to amputation.

The shafts of both bones close to the joint present haversion canal enlargement and a possible thinning of the osseous cortex, the latter not marked. The remaining shaft of each bone was remarkably firm and normal in appearance, and had suffered no appreciable trophic changes to cause friability of the compact substance, as is the rule.

Those familiar with the pathology of this affection will be impressed with the analogy of the findings in this case to the teaching of Charcot, as handed down since his learned contribution of 1868.

Something like 400 cases are now in the literary records, offering interesting analytical data. To add to such a storehouse of knowledge is not the intent of this report, but, instead, it is to interrogate the practical disposition of these cumbersome, useless joints.

They are millstones to the patient's usefulness, and cannot but induce absolute invalidism, and when the isolated arthropathy begins to be a burden I have thought to amputate and amputate early. The neuronic life of the parts is extinct, and why retain that which has become foreign to the state of well being, and which, by its very presence, adds to a further departure from well being, and thus acts as an etiological factor in advancing the molecular lesion of nutrition of the neurons of other members which might maintain functional integrity indefinitely if allowed a reasonable fight for physiological existence? For this reason amputation was done.

More than three years have elapsed and my man has been continuously engaged in full management of a business which nets him from $7,000 to $10,000 a year.

He uses an artificial leg and a pair of crutches, and though his other leg has a latent Charcot knee, he, like Josh Billings' turtle, "always gits to where he goes to" and is happy, comfortable and useful.

A second case illustrated in cut No. 3, had become bedridden. The general health had seriously suffered till he was hopelessly helpless and useless physically and dulled mentally. The success promised in the results of the amputation just cited, encouraged the amputation in this case by Dr. Howard Hill. Dr. Hill's measurement of the joint was 29 inches, the enormity of which is shown in comparison with the size of the well leg in cut No. 4, the tibia could be displaced three inches antero-posteriorly.

Prior to admission to the hospital this patient sustained a seemingly causeless fracture of the humerus, showing the extension of the pathological process to other bones than the knee joint.

Dr. Hill informs me that after the amputation of the defective leg, three years ago, the patient rapidly regained his mental and physical vigor, and with a little assistance in getting about, is now conducting a successful business.

Cut No. 3. Charcot joint measuring 29 inches. Amputated by Dr. Howard Hill.

Cut No. 4. Comparing the depreciated well limb in size with the enlarged joint.

To Fight Tuberculosis.—The consolidation of the recently organized Society for the Relief of Consumptives and the Society for the Prevention of Tuberculosis under the title "The St. Louis Society for the Relief and Prevention of Tuberculosis" was effected at a joint meeting of the two societies held on the evening of March 26. The new society has a great field and will do more effective work than could the two societies working independently.

Urge Check of Leprosy.—A strong appeal has been made to the Mexican authorities for measures to prevent the spread of leprosy at Culiacan. Many lepers are said to be in that city and the disease is reported steadily to be increasing. For some time the Mexican government has talked of establishing a leper colony on the Tres Marias Islands in the Pacific Ocean, but thus far nothing has been done.

SELECTED ARTICLE

THE IMMEDIATE TREATMENT BY THE GENERAL PRACTITIONER OF INJURIES OF THE EYE.*

F. A. MORRISON, A. M., M. D.

Professor of Ophthalmology in the Indiana Medical College, the School of Medicine of Purdue University.

MANY, if not most of the injuries of the eye come first under the care of the general practitioner and upon his treatment and advice depends frequently the future usefulness of the injured organ and sometimes of its fellow. This paper will deal with the immediate treatment of such cases by the medical attendant who from necessity or choice has paid but little if any attention to ophthalmology. In order to condense the matter into a short paper the discussion must be quite general. For our purpose the subject might be considered under two heads, first, injuries without, and second, those with more or less extensive abrasions of the surface of the eye-ball. The first may lead the practitioner into grievous error in prognosis, and may provoke uncalled for strictures on the part of the patient or his friends on the treatment or frequently lack of treatment given. No blow of any considerable force over or in the neighborhood of the eye should be considered lightly, and in the absence of immediate symptoms an unqualified favorable prognosis given. While the majority of such cases lead to no serious consequences yet the exceptions to this rule are of sufficient frequency to be of importance. It is possible for these so-called "concussions" to lead to subsequent inflammation or degeneration of the deeper structures of the eye. In the absence of symptoms after such a blow, of course no treatment is to be undertaken, but nevertheless the patient should be kept under observation for some little time, his vision occasionally tested and evidences of inflammation indicated by neuralgic pain and redness and tenderness of the ball sought for.

In this connection might be mentioned hemorrhages into the cavity of the orbit which, while they rarely produce immediate interference with vision, may ultimately lead to optic nerve atrophy or paralysis of the ocular muscles from long continued pressure. Such an accident is followed by pain and marked protrusion of the eye-ball, and frequently swelling of the lids. In such cases the patient should be at once if possible put to bed and ice cloths applied to the eye, followed by a snugly fitting bandage, which is to be kept in place until it is probable the effused blood has clotted or at least the hemorrhage has ceased. When a blow is followed at once or shortly by impairment or destruction of vision its serious nature is self-evident, evident in the absence of external marks. In such cases intraocular hemorrhage or detachment of the retina or dislocation of the lens suggest themselves. Here after the patient has been placed in the recumbent position in a darkened room a solution of atropia four grains to the ounce is to be dropped into the eye followed by the application of cold cloths for a few hours. Later a bandage may be applied and the patient permitted to go about. With a subsequent occurrence of aching pain in the eyeball or temple with redness and tenderness of the eye to pressure, intraocular inflammation may be considered to have occurred and the treatment outlined continued, except that hot cloths are to be substituted for cold and codein and salicylate of soda given internally to modify the pain and inflammation. It is best, however, to secure skilled consultation at once if possible.

In cases where a gradually increasing cloudiness of the vision commences within a few hours or days after the injury, with grayish pupil and without pain one may conclude a traumatic cataract to have followed from rupture of the lens capsule. Here the use of a drop of the atropine solution in the eye once or twice a day is advisable, although not really imperative. Should aching pain in the eyeball with redness and tenderness to pressure follow, it is probable that the rapid absorption of the aqueous by the lens has caused the later to swell and press upon the neighboring structures, such as the iris and ciliary body. Under these conditions the atropia is to be more frequently repeated, aided by the application of hot water and the internal administration of codein and salicylate of soda to relieve pain, if it exist. Owing, however, to the danger of secondary glaucoma, iritis or cyclitis with possible involvement of the other eye, it would be better on the whole to consult the ophthalmologist early. In this class of cases the diagnosis of "neuralgia" is so often made with disastrous consequences.

Deep penetrating non-infected wounds of the globe without prolapse of either the ocular coats or contents depend for their seriousness upon the parts involved. Ordinarily healing kindly, yet if in the ciliary zone the resultant inflammation may not only greatly damage the injured eye, but menace the safety of its fellow. If the wound has been in the cornea the possibility of traumatic

* Reprinted from Ind. Med. Jour., February, 1907.

cataract from injury of the lens must not be overlooked.

The treatment of such cases is simple, first to prevent infection by the use of a freshly sterilized solution of boric acid followed by one or two drops of the atropine solution and the sterile eye dressing. If the wound is in the sclerotic and seems to demand a suture it will be safer if this suture pass only through the conjunctiva and the most superficial layer of the sclerotic. The advent of signs of inflammations, as previously pointed out, demands the same treatment before mentioned for that condition. With the prolapse of any of the membranes or contents of the eye such as the iris or vitreous, extra care to prevent infection must be observed. It will be safer if the general dressing is at the best merely temporary, and at once secure the service of an ophthalmologist, as operative treatment is, as a rule, required in each case.

In penetrating wounds with the retention of the foreign body, the practitioner is warranted at once in giving a gloomy prognosis. The great majority of such will require enucleation, and in spite of the occasional brilliant result of magnet extraction in the cases of bits of iron or steel, the larger number of these will prove no exception to this rule. If anything is to be done in the way of extraction of the foreign body, it must be done early. To this end the immediate treatment is to place the eye at rest and prevent secondary infection by atropia, a sterile bandage after having first irrigated the inner surfaces of the lids, and all the recesses of the conjunctiva with a sterile saturated solution of boric acid. It is in these cases above all others sympathetic ophthalmia is to be feared, and they should get promptly into the hands of the ophthalmologist.

The immediate treatment of infected wounds frequently determines the retention or the loss of vision. Practically all wounds made by twigs, wheat beards, blades of corn or pieces of wood are infected. If the sclerotic is completely perforated and the infecting material carried into the vitreous, few eyes retain the globe, and fewer still useful vision. If the wound involves the cornea alone, the prognosis is somewhat better. The immediate application of a strong disinfectant or cauterant to the point of entrance would suggest itself, but save in the case of the cornea is useless, as the infecting material has already been carried far beyond the wound of entrance. The eye is first to be irrigated with a warm sterile saturated solution of boric acid, followed by a few drops of the atropic solution, the whole to be repeated every two or three hours. Either heat or cold may be applied, depending upon the relief afforded by trial, except in cases of corneal injury, where the application is to be restricted to heat. It is very probable pain will be severe and codein will be necessary for its relief.

All subsequent surgical procedures had better be left to the ophthalmologist. The course followed in the beginning frequently determines the retention or the loss of vision. Special care is to be taken in dressing the eye. Irrigation with a saturated solution of boric acid must be thorough and frequent, followed by atropia three times a day, or oftener if the infection is severe. Hot water frequently applied is of the greatest use, and codein may be required to relieve pain.

While it is necessary to protect the eye between the irrigations, and hot applications, the eye pad should be used with great circumspection. It is possible for a perfectly sterile pad, closely applied, to contribute to the spread of the infection by retention of noxious discharges. On the whole, it will be safer to use several thicknesses of sterile gauze, held in place by a single thickness of bandage, or a strip of adhesive plaster, so that it can be changed at frequent intervals. If the infected point shows a tendency to slough or ulcerate, its margins should be destroyed. Many plans have been proposed, and that which is easiest for the medicial attendant will be the best in a given case. As an efficient and safe procedure the application of carbolic acid or tincture of iodine is to be recommended. The eye is to be first cocainized; then the point of a match soaked in pure carbolic acid or tincture of iodine, the drop hanging to the point first shaken off, applied to every part of the infected area. The iodine is rather more efficient, but produces more subsequent pain. Such applications are to be made once a day until improvement sets in, the atropia, hot water and irrigations being at the same time continued. In lacerated or incised wounds of the conjunctiva or orbital tissues, not involving the globe, antiseptic irrigations, and if severe, cold applications, followed by the sterile pad, meet the conditions. Should suppuration threaten, the ophthalmologist had better be consulted.

Finally, a resume of the important points outlined above may not be without value:

Heavy blows about the eye may produce ultimate loss of vision without immediate symptoms of any kind.

Orbital hemorrhage without immediate effect upon vision may produce ultimate optic nerve atrophy or paralysis of the ocular muscles.

Wounds of the cornea always leave permanent opacities.

Deep seated inflammation of one eye may

cause the loss of the other. Injuries of the ciliary region are especially dangerous.

The violence of the inflammatory reaction of one eye after injury does not always indicate the degree of danger to the other. Long continued non-suppurative inflammation of the deeper structures of one eye is a menace to its fellow. The removal of the injured eye often fails to arrest commencing sympathetic inflammation of the other.

Foreign bodies retained inside the ball call for enucleation.

Aching pain in an eye after injury is rarely neuralgic.

A pinkish zone about the cornea with tenderness of the ball to pressure and aching pain points to deepseated inflammation and should cause the practitioner to be on his guard concerning sympathetic inflammation of the other eye.

An immediate loss or great impairment of vision following a violent blow about the eye without external injury points to intraocular hemorrhage, detachment of the retina or dislocation of the lens.

A gradual painless failure of vision with grayish pupil after perforation of the cornea is highly diagnostic of traumatic cataract.

A rather rapid loss of vision with a grayish pupil, neuralgic pain and a pinkish zone about the cornea coming on after a perforating wound of the cornea suggests traumatic cataract with rapid swelling of the lens substance, and may lead to secondary glaucoma or sympathetic ophthalmia. Redness and tenderness of an injured eye with haziness of its fellow, even without pain in the latter, makes one apprehensive of commencing sympathetic ophthalmia.

Cold applications are best in wounds of the conjunctiva, orbital tissues or complete ruptures of the globe. Hot applications are best in deep seated inflammations of the ball and of the cornea. If in doubt, it is safer to use hot.

Poultices should never be used in eye injuries.

Atropia is generally useful in eye injuries and has a sedative influence upon the deeper tissues of the eye.

Cocaine acts superficially and should not be long continued.

All solutions, even antiseptics, should be freshly sterilized before being used in the eye after injury.

THE Gazette Medicale de Paris, the oldest of French medical journals, will hereafter appear under the editorial direction of Dr. Lucie Graux, who has made an enviable reputation with medical readers in his position as editor-in-chief of the Gazette des Eaux.

THE MEDICAL FORTNIGHTLY

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EDITORIAL

What Shall We Prescribe?

A NUMBER of the less important of medical societies of the country are reported to have adopted resolutions pledging their membership to prescribe only remedies which appear in the United States Pharmacopeia and the National Formulary, and in some of the more important local organizations resolutions of this intent have been introduced, such being now pending in the St. Louis Society. We are not surprised that remote societies of small membership take such action, the agitation against certain proprietaries has been of a character to impress those who do not look deeply into the matter that condemnation sweepingly covers the whole class; but whether a society should adopt such resolutions without the affirmative vote of each and every one of its members is a question. We hardly feel that a majority vote of the St. Louis Society will of necessity hinder members voting with the minority from employing many of the dependable proprietary agents available should they feel disposed to do so. In fact we believe that many of those who may vote for its adoption will continue using proprietaries, for very few are going to make so close a study of the two volumes as to be able to say which of their good friends has been approved, and which are beyond the pale. We have the witness of our own eyes that there are men among those favoring the resolutions who have habitually and persistently prescribed proprietaries, and we have not a doubt they will continue doing so. What the medical profession wants is results, we want to cure disease, and if we find something which will enable us to accomplish this end it will take more than the voice of less than a tenth of the membership of our society to change our stand; we will have to be con-

vinced that the remedy is of indefinite and harmful character and its use wrong, and we will want to know what is the opinion of each and every member of the society, and not alone of that of the majority of the possibly seventy who may be present at the time the resolutions are considered.

We have no objections to the U. S. Pharmacopeia and the National Formulary, they are excellent books and founded on ideas splendidly conceived, every doctor should possess himself of them and become familiar therewith; but that does not mean that there are not a great many splendid remedies and combinations which do not appear in either. The strong argument for some of the proprietaries is the fact that their formulas appear in the Formulary under another name; the Formulary product in fact is not infrequently a very inferior looking substitute and does not give one confidence that it can by any possibility be as effective or elegant as the remedy in whose stead it is masquerading But we do protest against any society's attempting to force our therapy along any particular groove. We are thankful that the profession has been so signally served in the matter of unscientific and harmful proprietaries, what has been accomplished has been a tremendous service to the profession and to humanity. But there is a place and time when wisdom calls for a halt. No one wants the profession in its organization to be a trust, nor will the profession stand for therapeutic dictation of an arbitrary character unless it is backed by such evident wisdom as is not forthcoming in the wholesale condemnation of proprietaries.

In the days when we were debating the study of medicine we consulted one of the men who have made ours an honorable profession, and to whom the profession looks with deepest respect and the laity with almost reverence; he told me that medical science knew neither race, creed nor aristocracy; that the strong must ever be ready to learn from the weak, and the rich from the poor; that no one ever did or ever would know it all; that the strength of the body lay in interdependence in things of minor importance and within the limits of established scientific dicta and individual independence in other essentials; that each man in science had an absolute right to his own opinions, and a right to follow their lead so long as he offended against no scientific law. It seems to us that it lies with each man to settle for himself whether he will write prescriptions or dispense his own medicines, whether he will prescribe a proprietary or some other therapeutic agent. Many are using static electricity largely for its tonic effect, we know able men who say it is absolutely useless, but no one thinks of trying to make either adopt the methods of the other, yet there is just as much sense in a board's sitting on the static machine and ordering its use discontinued as there is in a similar commission's objection to many reliable proprietaries.

The History of Christian Science.

We never write the words "Christian Science" without an inclination to enclose them in quotation marks, for it has been so often said, and with truth, that the cult is neither one nor the other, christian or scientific. Our excuse for again referring to the cult is to again call our readers attention to the most interesting and instructive serial article on the history of Christian Science which is at present running McClure's Magazine and should interest every member of the medical profession, and it is hoped that none of our readers are overlooking it. Miss Milmine presents the results of tremendous research and keen discrimination in her discussion of the subject; she backs her more telling testimony with documentary evidence of unquestionable authenticity, evidence which places the Mrs. Eddy of a few years since at absolute variance with the Mrs. Eddy of later days. The tremendous growth of the cult and the deifying of its head are significant facts both indicating abnormal psychological conditions, the reaction from which will soon come.

The Growth of the St. Louis Society.

The organized profession is certainly growing rapidly these days, and it is a matter of not a little satisfaction to the officers of the St. Louis Society that the healthy growth is bringing in such excellent material. There has been some question whether an effort to enlarge the membership might not lead to laxity in the matter of requirements, but there has been no letting down of the bars, prospective members having to submit to quite as strict an investigation as has ever been demanded. The following new members were elected during March:

F. H. Birdman, City Hospital.
Jno. D. Boggs, 813 N. Eighteenth.
L. W. Grosse, City Hospital.
S. VanHoefen, 8404 Hallsferry Road.
R. F. Lincoln, City Hospital.

Richard L. Barrington, 208 Old Custom House.
Daniel C. Goodman, Lister Building.
J. J. O'Keefe, 1011 N. Leffingwell.
S. T. Lipsitz, City Hospital.
Elizabeth B. Reed, Lister Building.
R. E. Wobus, 2022 Salisbury.
M. P. Morrell, 3693 Olive.
Chas. H. Pope, 1557 S. Jefferson.
Sherman Pope, 1557 S. Jefferson.
M. Pitzman, City Hospital.
R. Shepard Bryan, Humboldt Building.
Henry P. Graul, 3353 Nebraska.
J. B. Menkhaus, 4607 Easton.

Color Blindness Discussed in the Century.

Speaking of magazine articles of interest to the profession, and you will find them with increasing frequency these days, a notable one appears in the April Century, the article being a discussion of Color Blindness, by Dr. Edward A. Ayers of New York City. The paper is of more interest to the profession than to the general public, yet it will appeal generally to the intelligent class of readers who take the Century. The subject is presented in a scientific manner, and is splendidly illustrated. The doctor considers color blindness with special reference to art and artists, but the adaptation of what he tells to other callings is evident.

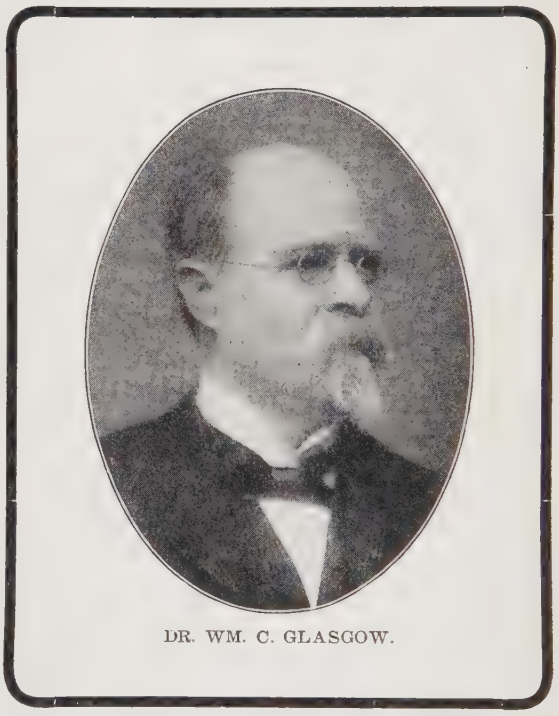
Dr. Wm. C. Glasgow.

The death of Dr. William Carr Glasgow, which occurred on the evening of March 22d, at his home, 4536 Westminster place, removes another of the older and most prominent of local physicians. So many of our readers have studied under Dr. Glasgow at the old Missouri Medical and later at Washington University, that they will feel with us the profound sorrow that the loss of one who has labored in our behalf occasions.

He was a native of one of the pioneer families. He was born January 16, 1845, and graduated from Washington University with the degree of A. B. in 1865. He studied in Germany and received his medical education at the University of Vienna, and at St. Louis Medical College, where he received the degree of M.D. in 1869.

Dr. Glasgow had been engaged in the practice of medicine in this city continuously since 1871. He was a professor in the medical department of Washington University, consulting physician of the City Hospital and at Martha Parsons Hospital for children on diseases of the throat and chest, upon which subject he was considered one of the highest authorities in the United States. He was a member of the St. Louis Medical Society, Missouri Medical Association, a fellow of the American Climatological Society and a fellow of the American Laryngological Society, of which he was president in 1890. He was a member of the 1st regiment, National Guard of Missouri, during the strike riots of 1878, and was a member of the Grand Avenue Presbyterian Church.

Dr. Glasgow had been a sufferer from a complication of kidney and bladder troubles for the past two years, and on account of his



DR. WM. C. GLASGOW.

illness had been obliged to discontinue his lectures at Washington University for more than a year. He, however, kept up his regular practice until March 17th, when his malady took a serious turn and he sank rapidly until he expired.

The St. Louis Medical Society appointed Drs. L. C. Boisliniere, H. Clay Creveling and Justin Steer a committee to draft resolutions to the memory of Dr. Glasgow, and devoted its session of March 30th to a memorial meeting, at which these resolutions were presented and numerous voluntary tributes from former students and friends.

The position of Steno's duct must be remembered when operating on the face.

REPORTS ON PROGRESS

Comprising the Regular Contributions of the Fortnightly Department Staff.

SURGERY.

JOHN McHALE DEAN, M. D.

Successful Anterior Thoraco-Bronchotomy for Foreign Body.—Francis H. Goelitz (Annals of Surgery, Vol. LV, No. 3) reports a successful case of anterior thoraco-bronchotomy for foreign body impacted in the bronchus. A patient, 6 years of age, inspired a small metal collar button, and it became impacted in the right bronchus. The usual symptoms of cough, cyanosis and dyspnea were present. Though no X-ray picture was taken it certainly would have been clearly demonstrated by this means if it had been resorted to. A low bracheotomy revealed the foreign body impacted in the right bronchus. Attempts at removal by forcpes, etc., were unsuccessful, and the author opened the chest and bronchus by an anterior thoraco-bronchotomy. After making a skin flap whose base corresponded to the 2d, 3d and 4th costal cartilages the pleura was incised. A portion of lung tissue being in the way it was cut through and two rings of the bronchus incised. The foreign body was removed through the opening. Although the symptoms following the operation were alarming, such as high temperature, rapid pulse and cutaneous emphysema, aided by the age of the patient, the final result was most satisfactory. For a few days after the operation air escaped through the thoracic incision, although it had been closed by suture. The tracheal opening was closed after the foreign body was removed, but subsequent symptoms forced the author to open it again and insert a tube. To the reviewer it seems the author may have fared better had he left both openings partially open. In operations that necessitate the opening of the pleural sac and incising the lung, four points are of utmost importance to be considered: Firstly, hemorrhage and its control; secondly, the results of the sudden conversion of a site where negative atmospheric pressure exists into one of positive pressure; thirdly, the prevention of shock from the above conditions; and lastly, the observance of strict aseptic precautions, since emphysema so often follows these operations. The first condition may be controlled by the suture, ligature or clamp and cautery; the second by previously introducing a tracheal or an O'Dwyer tube attached to which is a well guaged pressure pump or bellows; the third is avoided by observing the first two precautions and suppuration is prevented by proper sterilization of the parts, employment of strict asepsis and the judicial employment of drainage. To the reviewer no field of surgery is more worthy of earnest study, research and experimentation than the field of pulmonary surgery.

Primary Carcinoma of the Inferior Turbinate with Report of a Case.—W. W. Carter (Med. Rec., March 16, 1907) says that the early diagnosis of the malignant affections of the nose is most important, as they soon become inoperable from extension of the process. Mortality in late operation is 100 per cent. Malignant disease of the nose is rare, and is generally in the ethmoidal or sphenoidal region. The author's case was primary and began in the lower part of the nose, in the inferior turbinated bone. It appeared at the early age of 38, the disease being rare before 45. The symptoms were tickling in the right nostril, obstruction, hemorrhages, and headache. The growth was twice removed as benign. The author saw her five months after the beginning of the trouble. There was a cauliflower growth attached to the anterior extremity of the inferior turbinate, and nearly filling the nasal cavity. Discharge was serous and odorless. A piece of growth removed showed columnar-celled epithelioma. The growth and all the surrounding tissues in the superior maxilla were removed wide of the infected area. The patient made an uninterrupetd recovery, and at the present time, three months after operation, there is no recurrence. Primary malignant disease of the accessory sinuses is commoner than of the nose. As a cause of trauma is of little value. It probably does not originate from polypi, but does arise from adenomata and papillomata which have been submitted to long irritation. The symptoms are those present in this case. When sinuses are involved there is empyema of them. There is little tendency to metastases; glandular involvement is rare and late. The lateral pharyngeal glands, those near the cornu of the hyoid bones, and one on the axis, are first involved. Cachexia is a late symptom. Duration is from one to three years. Prognosis is bad; there is no authentic case in which recurrence has not occurred. Partial operation will generally hasten the diffusion of the growth by liberation of the cancer cells into the blood stream.

Operation for Shortening the Broad Ligaments.—A. E. Hertzler, Kansas City, Mo. (Jour. A. M. A., Jan. 26), describes anatomic characters of the broad ligaments, showing that they are not as they are commonly described, formed of two layers of the

peritoneum, as he understands the latter. The peritoneum covers all the intra-abdominal suspensory ligaments, but is nowhere identical with them, and this is particularly true of the broad ligaments, which are the strongest of all. He describes the broad ligaments as mainly made up of two strong fibrous bands, extending from the pelvic wall at the white line and just below it, to the uterine cornu and cervico-uterine junction respectively. These can be dissected out by vaginal incision, freed from the uterine artery, and ureter if desired, and drawn out from three to six centimeters, according to the degree of prolapse. In his later operations, a transverse incision is made in front of the cervix and the end of the ligament exposed by passing the finger between it and the vagina, thus getting below and behind it. It is then easy to follow it up as far as the uterine artery. With care the peritoneum can be lifted up without injury. If the uterine artery is tied, which can be done extraperitoneally if desired, it is not necessary to ligate the ligaments, but he usually severs them between two ligatures, one as close as possible to the cervix and the other a centimeter or less more lateralward. After free exposure of the ligaments they are overlapped as far as may be necessary to raise the cervix high enough The method of overlapping is unimportant; an imitation of that used by Mayo, an umbilical hernia, is satisfactory and easily applied. Pyoktanin gut is used for all sutures; plain gut for ligatures. In cases of high prolapse he adds to this operation either a Duessen fixation or a Freund-Wertheim. In patients of child-bearing age, he has added a shortening of the round ligaments to hold the uterus up, which he does by making a Wertheim incision over the pubis and opening the abdomen after his method. The pelvic contents are examined and given the needed treatment. The round ligaments are reached by retracting the lateral angles of the wound, thus exposing the external inguinal ring. The ligament is seized, subperitoneally, by a curved forceps passed into the abdomen along the inguinal canal, and it is dragged out into the external ring, the grasp within the abdomen being guided by the finger. By this method the peritoneum over the round ligament is not opened, there is no extraneous hands to give trouble and only pre-existing openings are utilized. If the uterus is fixed by adhesions, this operation should precede the shortening of the uterine ligaments, otherwise not. As a fact, a fixed uterus is usually not prolapsed, and does not call for shortening of the uterine ligaments. Hertzler's operative results have been satisfactory and he thinks his method, above given, is mechanically more correct than those usually employed.

PATHOLOGY AND BACTERIOLOGY.

R. B. H. GRADWOHL, M. D.

Arterial Tuberculosis.—O. Geizler (Virchow, Archiv, Bd. VI, Heft 2), 1906) reports autopsy findings in a case clinically diagnosticated tumor of the pleural cavity. The autopsy showed a collection of fluid in the right pleural cavity, with tuberculosis in the shape of cavity formation in the apex of the left lung. The thoracic portion of the aorta several grayish yellow masses upon the intima. The peritoneal covering of all the abdominal organs showed similar masses. The abdominal portion of the aorta showed similar masses as did the arteriae iliacae et femorales. The femoral arteries showed calcified patches as well upon the intima. A sharply defined ulcer was found in the ileum. The anatomical diagnosis was arterio-sclerosis of the peripheral arteries, multiple intima-tuberculosis of the aorta ascendens, descendens, iliaca and femoralis, hypertrophy of the left and dilatation of the right ventricles, old tuberculosis of the lung apex, chronic miliary tuberculosis of both lungs, compression atelectasis of both lungs, adhesive pleuritis of both apices, exudative pleuritis dextra tuberculosa, peritoneal tuberculosis, anthracotic lymphoma of the bronchial glands, caseous splenic tuberculosis, chronic interstitial nephritis, caseous kidney tuberculosis, recent tuberculous ulcus of the ileum, gastritis chronica, stagnation liver, leptomeningitis and hydrocephalus externus.

The nodules in the larger vessels excited the suspicion of tuberculosis and to verify this several were fixed in formalin and frozen sections made thereform. Benda has previously called attention to the fact that tubercle bacilli are easier found in nodules when they are sectioned under freezing than under celloidin imbedding. Geiszler verifies this observation of Benda's. These nodules consisted of epitheloid cells, round cells and leucocytes with a caseous center. The endothelium was piled up over these nodules. The intima showing one leaflet under the tubercle, the other over it, as Stroebe has observed, was not the condition found in this particular case. The sections showed tubercle bacilli in the masses in the intima, with rich mass of round cells in the media. No giant cells were observed. No fibrin formation was seen under Wiegert staining.

This case represents the second one of its kind where so many parts of the aorta and its immediate branches showed tubercle

formation. The first case is reported by Luksch in the Prager medizinischer Wochenschrift in 1903. In his case nine tubercles were seen in the aorta, arteria anonyma and left arteria subclavia.

In Geiszler's case eleven tubercles were seen. Both cases belong to a group which Weigert thinks represents the starting point of general acute miliary tuberculosis infection.

Benda who has shown great interest in this arterial form of infection designates two classes: endangitis and periangitis tuberculosa. Periangitis starts from the adventitia, progresses to the media and is here prevented from going further by the elastic lamella. The intima in these cases only shows a simple productive or thrombotic inflammation. This process is seen in the neighborhood of tuberculosis areas like caviites. If the process can break through the elastic tissue, we have the tuberculosis affecting the tissue down to the lumen of the vessel. Weigert claims that these conditions only arise as do tubercle formation in general miliary tuberculosis, by implantation upon the vessels. This is opposed to the views of Benda, Ponfick, Orth, Muegge, Stroebe and others. Benda claims that the cases of tuberculous infection of the blood vessels coming by way of the lymphatic and blood streams are endangitis tuberculosa. This forms begins as a proliferation of epitheloid cells, mono- and polynuclear leucocytes. This is covered over either with endothelium or thrombotic clots. Soon begins giant cell formation and caseation. These tuberculous formations can exist for a long time as polypoid masses without materially affecting the structure of the media or adventitia. After a protracted period of existnece widespread destruction and changes take place in the media and adventitia. The centrum of the mass shows softening at that time. In a few cases we find fibrin masses upon the polypoid tubercles. That they are not more often encountered is explicable on the basis of their rapid transformation into homogenous hyaline material.

It is but seldom that we see a tuberculous ulcer in a vessel most often they are seen in the ductus thoracicus. This is due to the rapid covering with fibrin.

The fact that many writers claim that tubercle bacilli are not often found in these blood vessel lesions, for instance, Weigert, Wild, et al., is due to the fact already alluded to by Benda that only sections made with the freezing microtome show them, not so well are they seen in celloidin sections.

The danger to the system of these polypus-tubercles is manifest. The least irritation means the liberation directly into the blood stream of many tubercle bacilli and a widespread miliary tuberculosis. In cases of periangitis tuberculosa the process can break through the elastic lamella and lead to the same consequence.

Morphology and Significance of Lymphocytes and Uninuclear Leucocytes in Gonorrheal Urethral Secretions.—J. Neuberger (Virchow's Archiv, Bd. VII, Heft 2, February, 1907) states that Pappenheim in 1901 called attention to the appearance in urethral gonorrheal pus of uninuclear leucocytes and lymphocytes. Deganello and Leuchs have since recorded their observations on gonorrheal pus from the human urethra.

Pappenheim said that the appearance and number of the lymphocytes and uninuclear leucocytes was a diagnostic mark of the greater or less chronic character of the gonorrheal process. Posner, Joseph and Pollano since then have agreed with Pappenheim's hypothesis.

Neuberger has applied himself to this question with the sole idea of obtaining observations which would tend to throw some light upon the subject, not, however, with the idea of upsetting this or that particular theory. The pus was obtained from the human urethra by expression, no conclusions being drawn from examination of the so-called "gonorrheal shreds." The secretion was rubbed on glass slides with the platinum loop. The streaking was done gently, often by the aid of streaking with a piece of paper. Fixation was accomplished by means of gentle heating over an alcohol flame or by waving through the air. Results were similar with both methods of fixation. The method of Posner of fixation by means of osmic acid fumes was tried, but this procedure could not be said to be made in any respect to the methods detailed above. The following staining fluids were used: May-Gruenwald, Pappenheim methylgreen-pyronin, Loeffler methylene blue, eosin-methylene blue, etc. Neuberger claims that Loeffler methylene blue stain suffices to bring out all the nuclear elements, distinguishing the multinuclear leucocytes easily from the uninuclear and lymphocytes.

Neuberger shows by a number of illustrations the various kinds of lymphocytes, some with large nuclei and narrow surrounding protoplasm, others with small nuclei and wide protoplasm. He readily differentiates with the Loeffler stain the difference between the uninuclear leucocyte and the lymphocyte; the uninuclear leucocytes have a sharp, deep blue stain with a very light protoplasm, while the lymphocyte has a faint difference in coloration between nucleus and protoplasm.

He calls attention to a very large lymphocyte which has been called the "macro-lymphocyte." The uninuclear leucocyte is further differentiated from the lymphocyte by the frequent appearance of large vacuoles in the plasma of these cells. The uninuclear leucocyte also shows a poverty of chromatin substance as opposed to the abundance of chromatin in the lymphocyte.

As to the hematogenesis of the lymphocytes and uninuclear leucocytes, Pappenheim claims that the large uninuclear leucocyte and transition cells are direct cytogenic developmental forms of the large lymphocytes on the one side and the uninuclear leucocytes and transition forms on the other, and there are all kinds of intermediate pictures." Neuberger, however, claims that he can always distinguish the ear-marks of either the lymphocyte or the uninuclear leucocyte, and does not recognize the "transition" forms of Pappenheim.

We must also recognize the fact that conglomerate forms of leucocytes are met with, one fused into the other, sometimes too with a lymphocyte fused along. Sometimes the process of fusing shows one plasma with retention of two or more of the nuclei of the original uninuclear leucocyte.

It is very difficult to distinguish between uninuclear leucocytes and epithelial cells, the opinion of Pappenheim notwithstanding. Pappenheim claims that they can be differentiated from one another in this manner: the epithelial cells have a different size, sharper borders and definite contour, are more deeply stained, have a more voluminous cell body with a more precisely placed nucleus, and their protoplasm shows a yellowish roseate coloration. Neuberger claims that the same pictures can be seen with uninuclear leucocytes.

The writer also claims that uninuclear leucocytes are met within the urethral secretion as the so-called Metschnikoff macrophagocytes, that is, they result from the ingestion of uninuclear leucocytes by the multinuclear leucocytes. The uninuclear leucocyte often shows within its body the presence of gonococci. Pappenheim agrees with the writer on this point, yet, Joseph and Pollano and Von Bibergeil contend that they are not able to find the gonococcus in these cells.

Coming now to the question of the significance of the lymphocytes and uninuclear leucocytes in gonorrheal secretion, it is claimed by Pappenheim that they have diagnostic importance. He claims that he can tell from the number of these cells the character of affection in regard to greater or less chronicity. Joseph and Pollano say that these cells are the first signs of a progressive catarrhal process located, first on epithelium, extending to the submucosa and shows the first indication of infiltration.

Therefore a large number of uninuclear elements is a finger-mark for prognosis and therapy. Posner, however, states that in 41 cases of acute gonorrhea twice in two cases on the second day, further on the third day, on the fourth and tenth day he found many lymphocytes in the gonorrheal secretion. Joseph and Pollano contend in answer that these cases of Posner's indicate that these patients had passed through an earlier gonorrhea (previous infection) which had not been perfectly cured, leaving a stricture. The experience of Neuberger has been that lymphocytes and uninuclear leucocytes appear "early in the game" in acute gonorrhea, and that gradually disappear as the affection subsides. Sometimes the lymphocytes predominate, sometimes the uninuclear leucocytes, sometimes they exist in equal abundance. The appearance of macrophagocytes is on no account to be considered of diagnostic value. In one case of Neuberger's, the macrophages appeared in great numbers, and their number, did not lessen day after day. They have no prognostic value.

Lastly, the subject of the so-called "bullet-shaped nuclei" must be mentioned. Leuch called attention to the presence of sharply rounded, intensely stained nuclei, forms of nuclei of small size and situated within a small protoplasm, often free nuclei existing as an extra-protoplasmic body. They were described by Leuch as sometimes showing half spherical in shape. Leuch did not explain their existence, though he disbelieved in their derivation from other cells as generation processes. He found them in three cases of gonorrheal urethritis, in three other cases only a few were found. Posner believes that they are degeneration formations. Bab found them after intra-peritoneal injections of milk into guinea-pigs and considered them a form of multinuclear leucocytes not hitherto described. Hirschfield claims that they have been seen for a long time in all kinds of pus. Posner claims as a result of his experience that these round cells may be used as differential agents, i.e., that they are found in urethritis which is not gonorrheal, but caused by other bacteria. Unfortunately, Neuberger claims that he cannot agree with Posner on this point because he has found them frequently in the subacute stage of gonorrhea, in instances where there is a scant secretion of pus, with retention of urine for some time. Their presence has nothing to do with the absence of presence of gonococci; they occur after a long urine-pause, during which interval the

multinuclear leucocytes have had a chance to degenerate into these bullet-shaped bodies. That they are degeneration formations appear to be true, for the reason that they are never seen with gonococci in their bodies.

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OBSTETRICS.

E. S. McKEE, M. D.

Puerperal Eclampsia.—Dr. J. B. Halligan gives the following treatment during the attack. He says that this depends on the condition of the patient, and whether delivery is near or remote or has taken place. The author believes that the presence of repeated convulsions at any period of pregnancy is an indication for termination of pregnancy, as it is a well-established clinical fact that the convulsions often cease upon the death of the fetus, or upon the delivery of the child. The presencee of convulsions at an early period of pregnancy indicates an extreme virulence of the poison, or an undue susceptibility of the patient, either of which would most likely prevent carrying of the child to term. Morphine is, in the author's opinion, the most reliable simple remedy in the treatment of eclampsia. It can be given hypodermically at the same time that chloral is given by the rectum. Thirty grains of chloral in one quart of normal salt solution is given per rectum as indicated. Morphine obtends the sensibility of the nervous system, making it less susceptible to the irritating action of the toxic material in the blood. The use of salt solution dilutes the blood, and therefore less irritating to the nervous system. It also powerfully increases the renal secretions, acting as an eliminant. In this respect it antagonizes the action of morphine, which has a tendency to suppress renal secretion. Calomel and croton oil are clearly indicated in nearly every case. Chloroform controls the convulsions for the time being. The patient should be wrapped in hot blankets, which should be changed every half hour. Veratrum viride has its advocates, but the author does not believe its employment rests on a rational basis. It is one of the most dangerous depressants in the materia medica. It also increases the mucous secretion, thereby directly increasing the danger of deglutition pneumonia.

Treatment of General Puerperal Peritonitis.—Cyrille Jeamin tells us that the treatment of general puerperal peritonitis has made great strides in advancement since surgical methods have been employed. The author has collected from medical literature 118 cases that have been operated upon. He finds that there have been 60 recoveries and 61 deaths after operation; that is, nearly one-half of the patients have recovered. The prognosis in such cases depends on the character of the peritonitis. In the hyper-acute cases death always ensues, while in the more chronic cases the patients are often cured by operation. Post-partum peritonitis is more serious than post-abortion peritonitis —L'Obst., Am. Jour. Obst.

The Diagnostic Significance of Decidual Tissue.—Dr. W. P. Graves (Boston Med. and Surg. Jour.) states that the passage of the decidual membrane in a patient with symptoms of pregnancy, and with a mass on one side, together with a history of flooding, is extremely significant of an extrauterine pregnancy, but cases do occur where this seemingly conclusive chain of evidence is not proof of an extra-uterine gestation. An ordinary miscarriage may be preceded by the exfoliation of a part or the whole of the decidua vera. A pathologist who receives a specimen of decidual tissue should make his report with extreme reservation to avoid the commission of a serious surgical blunder. It may be impossible to differentiate, even with great microscopical care, between an exfoliated dysmenorrheic membrane and the decidua of an extra-uterine pregnancy.

Puerperal Sepsis.—Dr. S. Marx (Med. Rec., Am. J. Obst.) maintains that practically all cases of puerperal septic infection arise from ulcers in some part of the genital canal. He places the ulcers in two classes: (1) desquamative; (2) exudative. When an ulcer is visible it should be cauterized with pure carbolic acid, and the action of this stopped in a minute or two by alcohol. This is repeated every 24 to 36 hours. When the ulcers are confined to the lower genital tract, the uterus is not to be invaded.

Superstition in Teratology.—The belief in maternal impressions affecting the fetus is vigorously attacked by E. T. Shelly, Atchison, Kan. (Jour. A. M. A., Jan. 26). While

the ancient notions regarding monstrous births, which he mentions have been given up by modern authorities, he quotes a number of recent text-books showing that the belief in maternal impressions is by no means entirely abandoned. It has however, he says, only one argument in its support, that is, that of post hoc ergo propter hoc. Against this, we have the scientific fact that the relation of the fetus to the mother is not one of continuity, but simply of contiguity, the mother being the host and nourisher of the developing child. The physiologic relationship between the mother and embryo is so slight that for the practical difficulties involved, the impregnated human ovum might be transferred from one womb to another wihout interrupting its development, as has actually been done in some of the lower animals. Even the blood of the mother can only reach the child by osmosis through a membranous barrier, and there is no direct nervous communication whatever. The unfortunate structural aberrations originate very early in development and often before a woman is aware of her codition, and practically always before the maternal impression, to which the anomally is ascribed, takes place. The great objection to the superstition, however, is the baneful effect on the expectant mother, to say nothing of the bad effect it has on the study of teratology, cases which should receive careful scientific study being relegated to idle speculation on maternal impressions and fancied resemblances.

A Report of Two Cases of Puerperal Septicemia Complicated by Abscess of the Parotid.—(A.B. Davis, Bull. of the New York Lying-in Hospital.)—Both of these cases suffered from septicemia and a considerable time after their delivery each developed an inflammation in the right parotid gland, which grew and spread rapidly and then in a short time subsided, except in the gland itself, and its very near surroundings. Here it remained for a number of days as a tense, painful brawny swelling, in which it was impossible to make out softening or fluctuation; or to know in which direction to cut in order to give relief. Both patients had pneumonia. One seemed to have a profound streptococci infection. Her resistance had been lowered by an acute anemia from hemorrhage and the shock of operative delivery. She was profoundly septic within a few hours of the delivery of her child and continued to be so; with an increasing anemia until her death. The other patient, while at times she seemed equally ill, would respond in some measure to treatment. No bacterial growth could be found in her blood or in the discharges, but staphylococci were found in the pus from the parotid abscess. She had the anemia always found in septicemia, but as her septic processes began to subside the quality of her blood improved. Stress is laid on the open air treatment in such cases, keeping the bed on the roof exposed to the sun and air in all but stormy days.

GENITO-URINARY.

T. A. HOPKINS, M. D.

The Phloridzin and Indigo-Carmine Methods for Determining Kidney Function.—In an extensive and highly scientific consideration of "Modern Surgery of the Kidney" (Surg., Gynecol. and Obstetrics, Vol. IV, No. 1) Kümmel gives the following details relative to these two important methods: He believes the phloridzin method a useful chemical method of determining the functional activity of the kidney. It appears to have decided advantages over the use of methylene blue and indigo-carmine. The ability of phloridzin to produce a renal glycosuria, first discovered by von Mehring, and further experimentally tested by Klemperer, Achard and Delamare, was utilized by Casper to determine the sufficiency of the kidney. After a subcutaneous injection of 1 to 15. mg. of phloridzin, the healthy kidney excretes urine containing sugar after 15 to 20 minutes, whereas a sugar reaction is shown much later, or not at all, by the diseased kidney. If a ureteral catheter is placed in each ureter, the sugar reaction may be observed and controlled for a long time. Casper employed this method in a large series of cases and found it to be reliable. Kümmel also tested it in a number of cases, and was able to prove its accuracy by subsequent operations. His experience with the phloridzin method has not been sufficiently extensive that he could give a final opinion as to its value. There are cases and circumstances in which it has shown itself not absolutely reliable, and Casper himself has called attention to some necessary restrictions. In any case, he considers the method a valuable addition to the means of kidney diagnosis, especially since it may be combined with the ureteral catheterization performed before every operation. The use of indigo-carmine, which was introduced as a method of kidney diagnosis by Voelkers and Joseph, has undoubted advantages over the use of the methylene blue of Castaigne, since the blue color of the former is much less changed by the urine. This method is very welcome, as it is a decided aid in catheterization of the ureters. For the beginner it locates more accurately the

ureteral openings, which are not always easy to find, by the blue stream of urine, and it also aids the more skilful examiner in the search for these openings when they are indistinct in cases of severe ulcerative cystitis in trabeculated bladders, and also in cases of bladder tuberculosis. We are also able to show by the indigo-carmine method whether or not two ureteral openings, and consequently two kidneys, are present, and whether the latter excrete urine. Also, the accidental escape of urine alongside of the introduced ureteral catheter becomes distinctly apparent to the examiner. Catheterization of the ureters and the diagnosis of the functional activity of the kidneys will, however, not be rendered superfluous by the indigo-carmine method. Even though we know that both kidneys secrete urine, the one perhaps more than the other we cannot from this alone formulate any judgment as to the comparative activity of the two organs, nor as to the density, urea concentration, or molecular qualities, or, in short, of the conditions of the separate urines from each kidney, and this is necessary before any radical operation be undertaken. We must know with certainty whether the kidney which is to be left is healthy or able to take upon itself the function of the one to be removed. These questions are answered accurately by ureteral catheterization and functional kidney diagnosis. The observation of the urine escaping from the ureteral openings, and the judgment of the functional activity based thereon, does not appear to be safe. In no case does the indigo-carmine method make ureteral catheterization unnecessary.

The Local Use of Strychnine in Vesical and Sexual Weakness.—W. J. Robinson, New York City (Jour. A. M. A., Dec. 28), advocates the use of strychnin locally in cases of atony of the bladder and sphincters, showing itself in weakness of micturition, and in sexual weakness as revealed by ejaculatio precox; both being, as he claims, rather frequent conditions. His method consists in injecting a solution consisting of strychnin sulphate, 1 grain; hydrastin hydroclorid, 10 grains; in eight ounces of saturated solution of boric acid; one minim of the combination containing 1-400 grain of strychnin and 1-40 grain of hydrastin. He has the patient urinate; washes out the urethra with an antiseptic solution, and then, using a Guyon syringe, with properly sterilized Guyon catheter attached, filled with the strychnin solution, he screws down the piston till a drop appears at the tip, and introduces it into the urethra to the point he wishes to medicate. Then turning the screw he deposits as many drops as desired, each turn of the screw corresponding to one drop. He seldom uses more than four drops, amounting to 1-100 grain of strychnin and 1-10 grain of hydrastin, given once or at most twice a week, and with this obtains more definite positive results in these cases than with 1-20 grain of strychnin three times a day for every day of the week. There are moreover, no after effects, such as strychnin may produce, when given by the mouth, and which often constitute a decided objection to its use. This is not the only combination employed, he sometimes uses ergotin or adrenalin, or both, with the strychnin instead of hydrastin. No cases have been met in which this treatment is inapplicable. Some patients have a specially sensitive urethra, so that any application may be irritating, and, in such, a local anesthetic occasionally becomes necessary. Robinson does not use cocain in the urethra, having once had a disagreeable experience with it, but uses some of the well-known substitutes. In concluding, he pleads for the stomach that it be allowed to exercise is proper function for food and drink and not be punished for sins of other organs, to say nothing of the taxing and irritating of the kidneys and general upsetting of system by oral medication when local treatment will suffice.

DEATH OF VON BERGMANN.—Professor von Bergmann, of Berlin, the well-known German surgeon, died of appendicitis at Wiesbaden on Monday of this week. He was operated upon the day before his death. Last summer he presided over a series of three meetings of the Berlin Medical Society devoted to a discussion of appendicitis, and voiced an emphatic opinion in favor of early operation, as a necessary preliminary to which was early diagnosis. He was born in Livonia, December 16, 1836, and studied medicine at the Universities of Dorpat, Berlin and Vienna. During the Austro-Prussian war of 1866 Prof. von Bergmann was at the head of the military hospital at Koeniginhoff, Bohemia, and during the Franco-Prussian war he directed the military hospitals at Mannheim and at Carlsruhe. He was appointed professor of surgery at Dorpat in 1875 and remained there until the outbreak of the Turko-Russian war, when he was attached to the Russian army of the Danube as consulting surgeon. In 1878 he became chief surgeon of the hospital at Würzburg and was called in 1882 to succeed Prof. von Langenbeck in the chair of surgery at the University of Berlin and in the direction of the surgical clinic of that city.

SOCIETY PROCEEDINGS

MEDICAL SOCIETY OF THE MISSOURI VALLEY.

(Special correspondence.)

The recent meeting of this association in Omaha (March 21, 22) was, in point of attendance and the excellence of the papers read, one of the very best in the history of its work. There is a noticeable absence, in this association, of what is commonly known as "society politics," as well as a lack of that element so common in medical bodies—"playing to the grand stand." There is an atmosphere of good fellowship in evidence, and a manifest desire on the part of the members to promote the cause of scientific medicine, which approaches enthusiasm. Herein lies the success of the society. It was organized very modestly in Council Bluffs some nineteen years ago, as a district society, and has grown to a body of National importance, with a membership covering nine states. A number of the organizers and charter members are still active workers in its ranks, among which we may mention Dr. Donald Macrae, of Council Bluffs, who was the first president of the society, and its present treasurer; Dr. J. M. Emmert, of Atlantic, Iowa; Dr. R. C. Moore, J. E. Summers and F. W. Milroy, of Omaha, and many others of equal note.

The sessions at Omaha were held in the Creighton Institute, in a hall admirably adapted to the purpose, well lighted, ventilated and carpeted.

At the evening session Dr. Alex. Hugh Ferguson, of Chicago, delivered a masterly and timely address on "Surgery of the Thyroid," and Dr. R. B. Sloan, of Kansas City, presented an excellent review of the latest literature and thought on the subject of "Gastroptosis." Both these addresses were enthusiastically received by an audience which taxed the capacity of the hall.

Dr. Alfred C. Croftan, of Chicago, presented a most interesting paper on the subject of "Nephrolithiasis Urica," which showed him to be a master of his subject in its later day aspects.

Dr. Fenton B. Turck, of Chicago, who is always instructive, gave some excellent advice in "The Non-operative Treatment of Gastric Diseases."

In our next issue we will present abstracts of these papers, as well as of others of equal interest.

The society added twenty-three new members to the roll.

Resolutions of respect and condolence were adopted on the death of Dr. B. F. Crummer, one of the founders and an ex-president of the association.

The sessions were presided over by Dr. O. B. Campbell of St. Joseph, Mo.

The next annual meeting of the society will be held in Council Bluffs in September.

Special Train to Atlantic City.—Those who contemplate attending the meeting of the American Medical Association, in Atlantic City, June 4 to 8, are invited to join the Missouri Valley party now being organized. The special will leave St. Louis, June 1, at noon, over the Big 4 and C. & O. via Indianapolis and Cincinnati, through the picturesque resort region of the Virginias, stopping at Hot Springs and White Sulphur Springs, and visiting the Jamestown Exposition. This train will be superbly equipped with Pullman Palace sleepers and diners, and will reach Atlantic City Monday morning, thus affording ample time for registering and attending auxiliary meetings before the opening of the A. M. A. on Tuesday. Special cars will leave Omaha (via Wabash), St. Joseph and Kansas City (via Mo. Pac.) May 31 (evening), and reservations should be made early. Headquarters in Atlantic City, Grand Atlantic hotel. Special rates. Full information, itinerary, hotel and Pullman reservations may be obtained by addressing the secretary, Dr. Chas. Wood Fassett, St. Joseph, Mo.

Fire in Kress & Owen's Plant.—On the night of March 4, fire consumed the entire plant of the Kress & Owen Co., New York, the well-known manufacturers of glycothymoline. We are informed, however, that owing to a reserve plant, which was quickly put in commission, no delay was experienced in filling orders.

Less Medical Students.—Reports from the various medical colleges throughout the country show a most decided falling off in the number of new students enrolled. Medicine does not seem to be at present as attractive a calling as it once was. Naturally the higher requirements for admission to most colleges, together with the rigid examinations required by the different State boards, has something to do with deterring young men from embarking upon the uncertain sea of medicine. Should this state of affairs keep up for another ten years those engaged in practicing the medical art will not find the struggle for existence as strenuous as it now is.—Medical Age.

MEDICAL MISCELLANY

During the first month of this year Chicago Food Inspectors condemned 1,720,666 pounds of food stuffs. This included 54 calves, 3 cattle, 3 hogs, 1325 pounds of poultry, 8500 pounds of canned goods, 270 pounds of dressed meats, 21,150 pounds of fish and 1600 pounds of rabbits.

An Advance in the Cost of Medical Books.—The W. B. Saunders Company announces that owing to the scarcity of leather and the increased cost of this material they find it necessary to advance the prices on their sheep and half-morocco books. The advance is but fifty cents on each volume, and is now effective. The advance does not affect prices on volumes bound in cloth.

Health of Canal Zone.—In the report for January of Col. William C. Gorgas, M. D., U. S. Army, chief sanitary officer of the Panama Canal Zone, he states that the principal causes of death among the employes were pneumonia, which caused 17 deaths and malaria, which caused 12. In August last the first-named disease caused 55 deaths, and malaria 29. Among the 5,000 American employes there were only 5 deaths, equivalent to an annual death rate of 12 per 1000. No death occurred among the 800 American women and children in the zone. During January more than 5,600 people arrived in the Canal Zone, and the working force was increased by nearly 2,000. During August, 1906, 42 out of every thousand men were on the sick list every day. In December the death rate dropped to 29 per thousand and in January it was 26 per thousand.

Recognition of Dr. James Carroll.—A movement is on foot which purposes the recognition of the services rendered science and humanity by Dr. James Carroll, who has just completed thirty-three years of service in the United States Army, and who is the only living representative of our government's scientists who were associate together in the epoch-making discovery of the relationship of the mosquito to yellow fever. Dr. Jesse W. Lazear sacrificed his life to experimental infection. Major Walter Reed was cut down just as he was reaping the reward so well deserved, the result of his unselfish devotion to science and to truth. Dr. Carroll is due, equally with his colleagues, all the honor and appreciation that our country can bestow upon him. He himself was the first to submit to an experimental infection with the yellow fever infected mosquito, and established through his own illness the truth of the fact now so well known. An endeavor is being made to secure an act of Congress allowing Dr. Carroll to retire with the rank of lieutenant in the United States Army. Such an act would meet with the approbation of the medical profession generally, and would but slightly show the Nation's appreciation for the service he has done the world.

The Age of Fishes.—The normal length of life of our common small minnows probably rarely exceeds four or five years, and may be much shorter; but there are few satisfactory observations on this point. No general rule can be laid down regarding the age of fishes or the relation between age and size. It is known that the salmons of the Pacific coast, which enter the rivers in such immense shoals, live to be four or five years old, and then invariably die after once laying their eggs. One Japanese fish died when one year old. On the west coast of Europe there occurs a small fish which is like an annual plant—that is, all the individuals die each year, and only the eggs remain to produce the next season's crop.—April St. Nicholas.

Folio Urologica.—With Professor James Israel of Berlin as editor-in-chief, Professor A. Kollmann of Leipzig, Dr. G. Kulisch of Halle and Dr. W. Tamms of Leipzig as associate editors and the other principal urologists of Europe as collaborators, these new international archives are announced by the house of W. Klinkhardt, Leipzig. Exhaustive original articles with colored plates and illustrations will be the principal feature of Folia Urologica. Contributions will be published in the four languages that are officially used in congresses and each paper will be summarized in the three other languages. The new publication will contain a department entitled "Events in Urology" in which the regular collaborators will periodically report on the advances in this specialty, after having tested them critically in their respective services and laboratories. Finally Folia Urologica is to serve as a means of collecting the annual reports on urological work in hospitals, clinics, etc., throughout the world. With a view to publishing contributions as quickly as possible, the issues of Folia Urologica will appear as often as required. Contributions from North, Central and South American authors may be sent to either of the American editorial representatives, William N. Wishard, M. D., Newton-Claypool Building, Indianapolis, Ind., or Ferd. C. Valentine, 171 West 71st street, New York.

It is not place, but love, which makes neighborhood.—Christopher Wordsworth.

THE MEDICAL FORTNIGHTLY

A Cosmopolitan Biweekly for the General Practitioner

The Medical Fortnightly is devoted to the progress of the Practice and Science of Medicine and Surgery. Its aim is to present topics of interest and importance to physicians, and to this end, in addition to a well-selected corps of Department Editors, it has secured correspondents in the leading medical centers of Europe and America. Contributions of a scientific nature, and original in character, solicited. News of Societies, and of interesting medical topics, cordially invited.

Advertising forms close on the first and fifteenth of each month. Time should be allowed to submit proof for correction Advertising rates on application.

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The Medical Fortnightly will not be discontinued at expiration of subscription, as many of our readers prefer not to have their files broken on account of failure to remit. Unless we receive a distinct request to discontinue, and payment for all arrearages, this magazine will not be discontinued.

Subscriptions may begin at any time; volumes end with June and December.

Contributors should understand that corrected typewritten copy is essential to clean proof and prompt publication, and is much more satisfactory than manuscript. Original articles should be as condensed as justice to the subject will allow.

Editorial offices in St. Louis and St. Joseph, where specimen copies may be obtained, and subscriptions will be received.

Contributions and books for review should be addressed to the Managing Editor, 319 and 320 Century Building, St. Louis, Mo.

FAVORITE PRESCRIPTIONS

RHEUMATISM.—Where there is great involvement of the joints with much pain, an absolute milk diet should be inaugurated and the following treatment:

℞ Extracti colchici cormi..... gr. x
Extracti digitalis..... gr. v
Arseni trioxidi..... gr. ss
Salicini.....
Phenylis salicylatis.....aa 3iss
Misce, fiant capsulae No. xxx.
Signa: One capsule every three hours.

Eternally, apply twice daily unguentum veratrinae to the affected joints, or employ the following liniment:

℞ Chloroformi..... f3j
Olei gaultheriae..... f3ij
Olei terebinthae..... f3iss
Aquae ammoniae fortioris..... f3ij
Spiritus camphorae, q. s. ad.... f3viij
Misce. Signa: Shake well, and apply to the painful joints with friction three times daily.—Med. Bul.

TREATMENT OF PRURITUS.—M. Brocq employs (La Medecine moderne) in the treatment of pruritus what he calls a "pommade aux trois acides" (promade of three acids), of which the following is the formula:

Phenic acid..... 1 part
Salicylic acid..... 2 parts
Tartaric acid..... 3 parts
Glycerole of starch .... 60-100 parts
Mix. For external use.

MASSAGE OR TOILET CREAM.—The following is an excellent preparation, suggested by Fassati, of Prague, in the Journal de Pharmacie d'Anvers for the purpose:

Lanolin..... 10 parts
Oil of sweet almond..... 10 parts
Precipitated sulphur..... 10 parts
Zinc oxide..... 5 parts
Extract of violet..... 1 part
Mix. This cream is said to be readily absorbed by the skin, beside being an efficacious remedy against blackheads, comedones, pimples, etc.

BRONCHIAL ASTHMA.—A. R. Edwards recommends the following combination in the treatment of bronchial asthma:

℞ Ext. grindeliae robustae fl..... f3j
Tinct. lobeliae.....
Tinct. belladonnae.....aa f3ij
Potassii iodidi..... 3jss
Syrupi..... f3j
Aquae, q.s. ad..... f3iv
Misce. Signa: One teaspoonful four times a day.

H. C. Brown recommends the following:

℞ Sodii arsenatis..... gr. iss
Aquae..... f3x
Misce. Signa: One tablespoonful before breakfast and supper. Or:

℞ Antimonii et potassii tart..... gr. j
Potassii chloratis..... gr. v
Aquae q. s..... f3iv
Misce. Signa: One teaspoonful every two hours.

He further states that no treatment of bronchial asthma is complete without proper attention to the general condition of the system, regulation of the diet and avoidance of all irritating substances.—Denver Medical Times.

HEMORRHAGE OF SEVERE CYSTITIS.—

℞ Morphinae acetatis..... gr. iv
Tincturae veratri..... f3j
Tincturae hyoscyami..... f3ij
Syrupi zingiberis..... f3j
Aquae, q. s. ad..... f3iij
Misce. Sig.: Teaspoonful in water every four hours.